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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,247	04/26/2006	Ken Matsubara	AI 410NP	4802
23995 RABIN & Berd	7590 01/23/200 o, PC	EXAMINER		
1101 14TH STI		WILLIAMS, MAURICE L		
SUITE 500 WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			3611	
			MAIL DATE	DELIVERY MODE
			01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/577,247	MATSUBARA, KEN		
Office Action Summary	Examiner	Art Unit		
	MAURICE WILLIAMS	3611		
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with the c	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	NATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>04 №</u> This action is FINAL . 2b) This 3) Since this application is in condition for alloward closed in accordance with the practice under £	s action is non-final. ince except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1-18 and 21-23 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-18 and 21-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and all any objection to the Replacement drawing sheet(s) including the correct that any objected to by the Examine	cepted or b) objected to by the land drawing(s) be held in abeyance. Section is required if the drawing(s) is objected to by the land drawing(s) is objected to be land drawing(s).	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate		

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/04/08 has been entered.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-9, 13-18 and 21-23 are rejected under 35 U.S.C. 103(a) as being anticipated by Shimizu (US 6,838,844) in view of Chikaraishi (US 2005/0133297). Shimizu discloses an electric power steering device comprising:

A steering assist electric motor (19) with a rotation shaft (48);

a speed reduction mechanism (18);

a motor housing (58);

a stator (54) fixed to the motor housing;

a rotor (52) co-rotatable with the rotation shaft, having a body and magnet (col. 7, ln.

63);

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a rotation angle detection means with a movable member (23a) and a stationary member (23b), which has an annular shape fixed to the housing (Fig. 4).

The motor housing includes a tubular body having first and second ends and an opening provided at the first end and an end cover (shown attached to housing in Fig. 4, bottom of page) attached to the first end to close the opening at the first end, and the stationary portion of the rotation angle detecting means is fixed to the end cover (Fig. 4). An annular power supply member (53) is attached to the first end of the motor housing body, and the rotation angle detecting means is disposed radially inward of the power supply member (Fig. 4 shows that 23 is disposed radially inwardly of 53, as the elements are concentric and 23 has a smaller radius).

The movable portion of the rotation angle detecting means includes a reference portion with projections provided the outer periphery serving as a reference (col. 8, ln. 11-14) for defining magnetized portions of the rotor magnet and for magnetizing the magnetizable member as a production intermediate member for the rotor magnet. The rotor body (51) includes an outer tubular portion (in contact with 52) to which the rotor magnet is fixed, a shaft portion (the proximal end of 52) provided coaxially with the outer tubular portion and retaining the movable portion of the rotation angle detecting means (Fig. 4 shows that 23 is disposed on the end of 51), and a connection portion (shown in the transition between the tubular portion and the proximal end of 51) which connects the outer tubular portion and the shaft portion.

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The rotor magnet has an outer tubular portion (52) with a first engagement portion on an outer peripheral surface thereof for engagement with the rotor magnet fitted around the tubular outer portion (Fig. 4).

The shaft portion has an engagement portion for engagement with the movable portion of the rotation angle detecting means (Fig. 4, shown on the distal end of **51**). The shaft portion has a coupling portion for coupling the rotation shaft of the electric motor to the shaft portion (Fig. 4, shaft portion is shown disposed inside the electric motor).

The unitary shaft includes a first end portion (12), a second end portion (15), and an intermediate portion between the first and second end portions (disposed inside housing 24), and the intermediate portion of the unitary shaft is supported by a combination angular deep groove ball bearings in back-to-back relation (41, 42).

The motor housing has a tubular body (58) having a first end (holding 23 as seen at the bottom of Fig. 4, affixed by a bolt) which is far from the speed reduction mechanism, relative to the second end.

Shimizu does not directly disclose a shaft having a concave portion into which a shaft is press-fit. Chikaraishi discloses a motor wherein a shaft (35) is press-fit into a concave portion (115) of another shaft (Figs. 31,32). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Shimizu as taught by Chikaraishi in order to make it possible to replace a single component upon failure.

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4. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being anticipated by Shimizu in view of Chikaraishi as applied to claim 9 above, further in view of Cheng (US 6,164,407). Shimizu and Chikaraishi disclose as discussed above, but does not directly disclose an end cover that is circumferentially adjustable to a motor housing body. Cheng discloses a motor cover (70) that is adjustable with respect to a motor housing by means of a screw (130) and an insertion hole with an arcuate shape (88). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Shimizu as taught by Chikaraishi and Cheng in order to allow the position of the motor cover to be adjusted to the optimal position during assembly.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurice Williams whose telephone number is (571) 272-4263. The examiner can normally be reached on Monday - Friday, 8 a.m. - 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maurice Williams/ Examiner, Art Unit 3611 Maurice Williams Examiner Art Unit 3611

MLW January 19, 2009

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3611